Amendments to the Claims

1. (Currently amended) A light-emitting diode characterized by comprising:

an electron injecting electrode, that is, an n-electrode;

a hole injecting electrode, that is, a p-electrode; and

an inorganic light-emitting ~~layer~~ film, wherein the inorganic light-emitting ~~layer~~ film (1) is formed of an inorganic semiconductor material ~~formed~~ deposited on a glass substrate and having an ambipolar property in which the ratio of respective mobilities of electrons and holes is in a range of 1/10 to 10, (2) is disposed between the n-electrode and the p-electrode so as to respectively contact the n-electrode and the p-electrode in a non-barrier junction manner such that the inorganic semiconductor material conducts both electrons injected from the n-electrode and holes injected from the p-electrode, and (3) has a thickness in a range of 100 nm or more and 10 μm or less,

wherein the inorganic light-emitting ~~layer~~ film emits light resulting from electrons injected from the n-electrode and holes injected from the p-electrode recombining between the two electrodes, and

wherein the inorganic semiconductor material ~~formed~~ deposited on the glass substrate and having the ambipolar property is selected from the group consisting of (a) a group II-VI compound and (b) Zn and at least one element selected from the group consisting of S, Se and Te.

2. (Currently amended) The light-emitting diode according to claim 1, characterized in that

the inorganic light-emitting ~~layer~~ film consists of a semiconducting material having a

dopant concentration of 0.1% or less in atomic ratio.

3. (Canceled)

4. (Previously presented) The light-emitting diode according to claims 1 or 2, characterized in that

the n-electrode includes a layer comprising an n-type dopant and the inorganic semiconductor material having the ambipolar property.

5. (Previously presented) The light-emitting diode according to claims 1 or 2, characterized in that

the p-electrode includes a layer comprising a p-type dopant and the inorganic semiconductor material having the ambipolar property.

6. (Previously presented) The light-emitting diode according to claims 1 or 2, characterized in that

the n-electrode includes a first layer comprising an n-type dopant and the inorganic semiconductor material having the ambipolar property, and the p-electrode includes a second layer comprising a p-type dopant and the inorganic semiconductor material having the ambipolar property.

7. (Currently amended) The light-emitting diode according to claims 1 or 2, characterized in that

a material of a portion contacting the light-emitting ~~layer~~ film in at least one of the

n-electrode and the p-electrode is formed by use of a material substantially different from the material of the light-emitting layer.

8. (Previously presented) The light-emitting diode according to claims 1 or 2, characterized in that

the n-electrode and the p-electrode are formed on opposing sides of the inorganic semiconductor material having the ambipolar property, wherein the n-electrode and the p-electrode do not contact each other.

9. (Currently amended) The light-emitting diode according to claims 1 or 2, characterized in that

a first one of the n-electrode and the p-electrode is ~~formed~~ deposited on the glass substrate, and the inorganic semiconductor material having the ambipolar property is stacked thereon, and a second one of the p-electrode and the n-electrode is stacked thereon.

10 -- 11. (Canceled)

12. (Currently amended) The light emitting diode according to claim 1, wherein only one such light-emitting ~~layer~~ film is formed between the p-electrode and the n-electrode.

13. (Currently amended) A light-emitting diode, comprising:

an electron injecting n-electrode;

a hole injecting p-electrode;

an ambipolar light-emitting ~~layer~~ film (1) continuously extending from the n-electrode

to the p-electrode, (2) consisting of an ambipolar semiconducting material ~~which~~ which is ~~formed~~ deposited on a glass substrate and which conducts both electrons injected by the n-electrode and holes injected by the p-electrode, (3) having a thickness in a range of equal to or greater than 100 nm and no more than 10 μm, and (4) comprising a first semiconductor material selected form the group consisting of (a) a group II-VI compound and (b) Zn and at least one element selected from the group consisting of S, Se and Te.

14. (Currently amended) The light-emitting diode of claim 13, wherein the ambipolar light-emitting ~~layer~~ film consists of the first semiconductor material.

15. (Previously presented) The light-emitting diode of claim 13, wherein the first semiconductor material is Zn and at least one element selected from the group consisting of S, Se and Te.

16. (Canceled)

17. (Currently amended) The light-emitting diode according to claim 1, wherein the light-emitting ~~layer~~ film consists essentially of the inorganic semiconductor material having the ambipolar property.

18. (Currently amended) A light-emitting diode characterized by comprising:
an electron injecting electrode, that is, an n-electrode;
a hole injecting electrode, that is, a p-electrode; and
an inorganic light-emitting ~~layer~~ film, wherein the light-emitting layer is disposed

between the n-electrode and the p-electrode so as to respectively contact the n-electrode and the p-electrode and is formed of an inorganic semiconductor material having an ambipolar property in which the ratio of respective mobilities of electrons and holes is in a range of 1/10 to 10, and has a thickness in a range of 100 nm or more and 10 μm or less,

wherein the inorganic light-emitting ~~layer~~ film emits light resulting from electrons injected from the n-electrode and holes injected from the p-electrode recombining between the two electrodes,

wherein the inorganic semiconductor material having the ambipolar property is selected from the group consisting of (a) a group II-VI compound and (b) Zn and at least one element selected from the group consisting of S, Se and Te,

wherein the n-electrode has a work function lower than a conduction band edge energy of the inorganic semiconductor material having the ambipolar property, and

wherein the p-electrode has a work function higher than a valence band edge energy of the inorganic semiconductor material having the ambipolar property.

19. (Currently amended) The light-emitting diode of claim 18, wherein the inorganic light-emitting ~~layer~~ film contacts the n-electrode without forming a barrier therebetween and the inorganic light-emitting layer contacts the p-electrode without forming a barrier therebetween.

20. (Withdrawn) The light-emitting diode of claim 18, wherein the n-electrode comprises Ga-doped ZnO and the p-electrode comprises $CuFeS_2$.

21. (Not entered)

22. (Currently amended) The light-emitting diode of claim 1, wherein the inorganic light-emitting ~~layer~~ film contacts the n-electrode without forming a barrier therebetween and the inorganic light-emitting ~~layer~~ film contacts the p-electrode without forming a barrier therebetween.

23. (Withdrawn) The light-emitting diode of claim 1, wherein the n-electrode comprises Ga-doped ZnO and the p-electrode comprises $CuFeS_2$.

24. (Canceled)